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(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): KOPPELAAR, Arie, G., C. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: ELEVVELD, Koop, J.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

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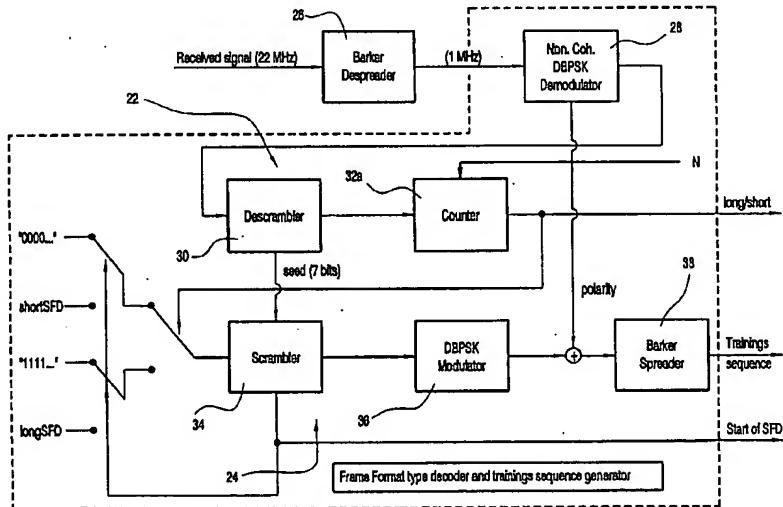
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(54) Title: FRAME FORMAT DECODER AND TRAINING SEQUENCE GENERATOR FOR WIRELESS LAN NETWORKS



(57) Abstract: A frame format decoder (22) and training sequence generator (24) for determining the frame format of received data which is compliant with the IEEE 802.11b standard for wireless local area networks, and for providing a training sequence for an adaptive equalizer (16). The received signal is first despreaded, demodulated and descrambled, so that the SYNC field is reconstructed, and then a counter 32 counts the number of consecutive bits having the same polarity or logic value until N such bits are counted (where N is an integer greater than 1). The polarity or logic value of the N counted bits enables the decoder (22) to determine whether the frame format is long or short. A training sequence, being a copy of the transmitted SYNC field eventually followed by an SFD field, is also generated for use by an adaptive equalizer (16).

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